



Association of American  
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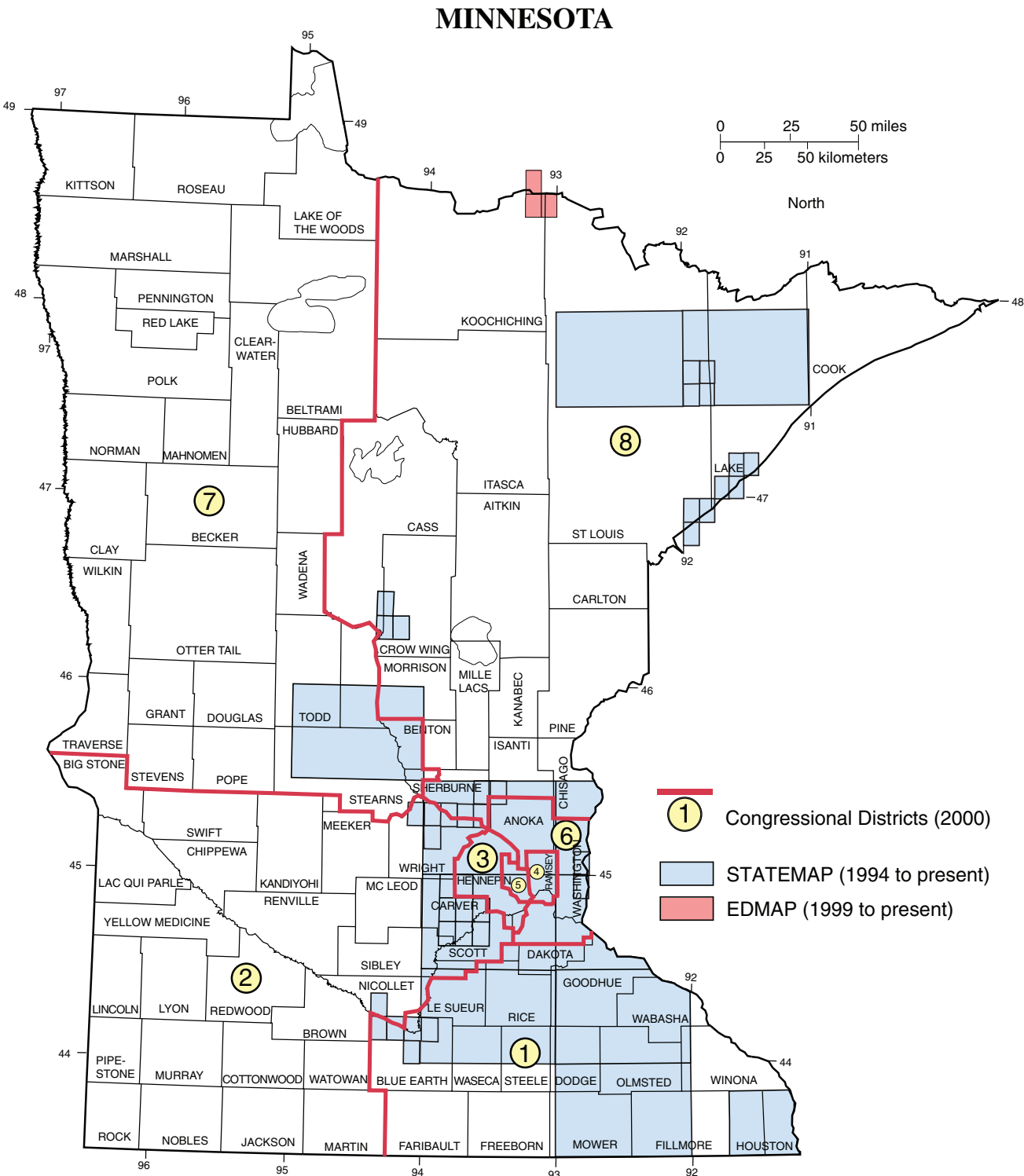


United States  
Geological Survey



# National Cooperative Geologic Mapping Program

STATEMAP/EDMAP Component: States compete for federal matching funds for geologic mapping



## Contact information

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SUMMARY OF STATEMAP AND EDMAP  
GEOLOGIC MAPPING IN MINNESOTA

Federal Fiscal Year	Project Title, Scale	State Dollars	Federal Dollars	Total Project Dollars
1993	Digitization of data from COGEOMAP projects (1987-92)	\$14,461	\$11,980	\$26,441
1994	Bedrock Geology of Houston County (eastern half) 1:100,000	\$18,000	\$18,000	\$36,000
1995	Bedrock Geology of Houston County (western half) 1:100,000	\$15,000	\$15,000	\$30,000
1996	Surficial Geology of the Shakopee quadrangle, 1:24,000			
	Surficial Geology of the Anoka quadrangle, 1:100,000	\$33,529	\$33,529	\$67,058
1997	Surficial Geology of the Jordan East quadrangle, 1:24,000			
	Surficial Geology of the Victoria quadrangle, 1:24,000	\$36,734	\$36,733	\$73,467
	Surficial Geology of the Jordan West quadrangle, 1:24,000			
1998	Surficial Geology of the Mound quadrangle, 1:24,000			
	Surficial Geology of the Stillwater quadrangle, 1:100,000			
	Surficial Geology of the Hastings quadrangle, 1:100,000	\$41,515	\$41,515	\$83,030
	Surficial Geology of the Waconia quadrangle, 1:24,000			
1999	Surficial Geology of the St. Paul quadrangle, 1:100,000			
	Surficial Geology of the Rochester quadrangle, 1:100,000	\$65,867	\$65,867	\$131,734
	Surficial Geology of the Watertown quadrangle, 1:24,000			
	Surficial Geology of the Belle Plaine N. quadrangle, 1:24,000			
2000	Surficial Geology of the Gull Lake quadrangle, 1:24,000			
	Surficial Geology of the Baxter quadrangle, 1:24,000			
	Surficial Geology of the Brainerd quadrangle, 1:24,000			
	Surficial Geology of the St. Cloud quadrangle, 1:100,000	\$76,942	\$76,912	\$153,854
	Surficial Geology of the Faribault quadrangle, 1:100,000			
	Surficial Geology of the Elk River quadrangle, 1:24,000			
	Surficial Geology of the Big Lake quadrangle, 1:24,000			
2001	Surficial and Bedrock Geology of the French River quadrangle, 1:24,000			
	Surficial and Bedrock Geology of the Lakewood quadrangle, 1:24,000			
	Bedrock Geology of the Babbitt NE quadrangle, 1:24,000			
	Bedrock Geology of the Knife River quadrangle, 1:24,000	\$156,081	\$156,081	\$312,162
	Surficial Geology of the Crown quadrangle, 1:24,000			
	Surficial Geology of the Lake Fremont quadrangle, 1:24,000			
	Surficial Geology of the Knife River quadrangle, 1:24,000			
2002	Surficial and Bedrock Geology of the Two Harbors quadrangle, 1:24,000			
	Bedrock Geology of the Castle Danger quadrangle, 1:24,000			
	Bedrock Geology of the Mankato East quadrangle, 1:24,000			
	Bedrock Geology of the Mankato West quadrangle, 1:24,000			
	Bedrock Geology of the Vermilion Lake quadrangle, 1:100,000	\$135,147	\$135,141	\$270,288
	Surficial Geology of the Monticello quadrangle, 1:24,000			
	Surficial Geology of the Silver Creek quadrangle, 1:24,000			
	Surficial Geology of the Castle Danger quadrangle, 1:24,000			
2003	Bedrock Geology of the Split Rock Point quadrangle, 1:24,000			
	Bedrock Geology of the Judson quadrangle, 1:24,000			
	Bedrock Geology of the Good Thunder quadrangle, 1:24,000			
	Bedrock Geology of the Ely quadrangle, 1:100,000	\$125,987	\$125,987	\$251,974
	Surficial Geology of the Annandale quadrangle, 1:24,000			
	Surficial Geology of the Buffalo West quadrangle, 1:24,000			
	Surficial Geology of the Austin quadrangle, 1:100,000			
	Bedrock Geology of the Two Harbors NE quadrangle, 1:24,000			
2004	Bedrock Geology of the Babbitt quadrangle, 1:24,000			

	Bedrock Geology of the Babbitt SE and SW quadrangles, 1:24,000			
	Bedrock Geology of the Courtland quadrangle, 1:24,000			
	Bedrock Geology of the Cambria quadrangle, 1:24,000			
	Bedrock Geology of the Stillwater quadrangle, 1:24,000			
	Bedrock Geology of the Hudson quadrangle, 1:100,000	\$149,554	\$149,554	\$299,108
3/21/05	TOTALS	\$868,817	\$866,299	\$1,735,116

Statement of Outcome

The bedrock geologic maps of the Mankato East and Mankato West quadrangles produced under the STATEMAP Program have been used by the Environmental Services Department of Blue Earth County to apply the water well construction code. The code requires specific design elements based on the geologic setting in which the well is drilled to avoid construction that allows contaminants access to the aquifer. The new geologic maps enable the well drilling contractor and the regulatory staff to anticipate the geologic setting, which results in better cost estimates for the homeowner, and fewer surprises for the driller and regulator. This promotes better compliance rates and results in better protection of the water resource. Prior to publication of these maps, no geologic maps suitable for this use existed.

The STATEMAP project also enabled the Minnesota Geological Survey to enter geologic descriptions and digital locations for existing water wells into the County Well Index database. That digital database is used by county staff, well contractors, homeowners, consultants, the MGS, and others in need of site specific descriptions of geologic and hydrologic conditions in a readily available format.

Minnesota Geological Survey Miscellaneous Map M-135 *Bedrock geology of the Mankato West quadrangle, Blue Earth, LeSueur, and Nicollet Counties, Minnesota*. J.H. Mossler. 2003. Scale 1:24,000.

Minnesota Geological Survey Miscellaneous Map M-136 *Bedrock geology of the Mankato East quadrangle, Blue Earth, LeSueur Counties, Minnesota*. J.H. Mossler. 2003. Scale 1:24,000

March, 2005